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EXHIBIT C
PENDING CLAIMS OF
CONTINUATION APPLICATION OF U.S. APPLICATION NO. 09/288,292
FILED ON FEBRUARY 8, 2002

1. A homozygous transgenic animal having a mutated rchd534 gene, wherein the wild-type rchd534 gene has been replaced with a rchd534-LacZ gene which lacks the MH2 domain encoding region, and wherein said animal displays a cardiovascular disease symptom.

2. The transgenic animal of claim 1, wherein said cardiovascular disease symptom is hyperplasia, thickening of at least one cardiac valve, cardiac outflow tract development defects, cardiovascular calcification, epicardial vascular malformations, endocardial vascular malformation, or defects in the regulation of vascular tone.

3. The transgenic animal of claim 1, wherein said cardiovascular disease symptom is cardiovascular calcification.

4. The transgenic animal of claim 1, wherein said cardiovascular disease symptom is aortic or valvular calcification.

5. The animal of claim 1 which is a mouse.

6. A cell having a mutated rchd534 gene isolated from the transgenic animal of claim 1, wherein said cell is isolated from tissue displaying a cardiovascular disease symptom.

7. The cell of claim 6, wherein said symptom is hyperplasia, thickening of at least one cardiac valve, cardiac outflow tract development defects, cardiovascular calcification, epicardial vascular malformation, endocardial vascular malformation, or defects in the regulation of vascular tone.

8. The cell of claim 6, wherein said symptom is cardiovascular calcification.

9. A cell line established from the cell of claim 6, wherein said cell is isolated from a tissue which exhibits at least one of the following cardiovascular developmental phenotypes: hyperplasia, thickening of at least one cardiac valve, cardiac outflow tract development defects, aortic ossification, epicardial vascular malformation, endocardial vascular malformation, or defects in the regulation of vascular tone.

10. A method of producing a homozygous transgenic animal having a mutated rchd534 gene, wherein the wild-type rchd534 gene has been replaced with a rchd534-LacZ gene which lacks the MH2 domain encoding region, comprising introducing a polynucleotide into an embryonic cell of said animal through homologous recombination with an endogenous rchd534 gene, and wherein said transgenic animal displays a cardiovascular disease symptom.

11. The method of claim 10, wherein said cardiovascular disease symptom is hyperplasia, thickening of at least one cardiac valve, cardiac outflow tract development defects, cardiovascular calcification, epicardial vascular malformation, endocardial vascular malformation, or defects in the regulation of vascular tone.

12. The method of claim 10, wherein said cardiovascular disease symptom is cardiovascular calcification.

13. The animal of claim 10, wherein said animal is a mouse.

26. A method for identifying a substance for treating or preventing cardiovascular disease, comprising administering said substance to a homozygous transgenic animal having a mutated rchd534 gene, wherein the wild-type rchd534 gene has been replaced with a rchd534-LacZ gene which lacks the MH2 domain encoding region, wherein said transgenic animal displays a cardiovascular disease symptom, and wherein amelioration of said cardiovascular disease symptom indicates a substance effective in the treatment or prevention of cardiovascular disease.

27. The method of claim 26, wherein said cardiovascular disease symptom is hyperplasia, thickening of at least one cardiac valve, cardiac outflow tract development defects, cardiovascular calcification, epicardial vascular malformation, endocardial vascular malformation, or defects in the regulation of vascular tone.

28. The method of claim 26, wherein said cardiovascular disease symptom is cardiovascular calcification.

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